

Tuesday, July 3, 2001

Delta launch sends MAP on journey to look at the history of the universe



Discovery arrives at launch pad 39A



▲ **Picture Perfect ELV Launch:** The Microwave Anisotropy Probe (MAP) lifted off on schedule at 3:46 p.m. EDT aboard a Delta II rocket from Pad B at Space Launch Complex 17, Cape Canaveral Air Force Station. About 90 minutes later--also on schedule--MAP separated from the Delta II third stage, deployed its solar arrays and began its journey to answer fundamental questions about the history,

content, shape and fate of the Universe. Science observations will begin once MAP reaches its L2 orbit. L2 is the second Lagrange point of the Sun-Earth system. L2 is four times farther from the Earth than the Moon in the direction opposite the Sun, or about one million miles from Earth. MAP is the first spacecraft to use an orbit around the L2 point as its observing station.

MAP is currently in a highly elliptical Earth orbit. In approximately one month, MAP will execute a gravity-assist swing past the Moon and then travel for two months to get to its L2 orbit. This particular trajectory is designed to minimize the use of fuel. From L2, MAP will have an unobstructed view of the sky, and will be free from near-Earth disturbances such as magnetic fields and microwave emission for its two years of science observations. More information on the MAP mission can be found at the following Web sites:

<http://www.gsfc.nasa.gov/gsfsc/spacesci/map/map.htm> and <http://map.gsfc.nasa.gov>



▲ **Shuttle Update:** After several weather delays, **Space Shuttle Discovery** (left) rolled out early yesterday morning to Launch Pad 39A where it will undergo final preparations for launch on mission STS-105, targeted for next month.

◆ **Mission Briefing:** The External Relations & Business Development Directorate will sponsor an employee briefing on the upcoming STS-104 mission, Tuesday, July 10, from 11-11:30 a.m., at the Training Auditorium. Please join us for this informative presentation.

◆ **The Spaceport Simulation Symposium (SSS)** will be held on Thursday, July 12, from 8:30 to 10:30 a.m. in the Headquarters Cafeteria. This event consists of presentations and demonstrations of simulation projects at the Kennedy Space Center that support shuttle operations, the International Space Station, and the development of next generation launch vehicles. The symposium, introduced by JoAnn Morgan (Chair), will include summaries of preliminary research by interns Braxton Davis and Rebecca Rodriguez on the state of KSC simulation projects. For further information, please contact Braxton Davis at 867-9148.

◆ **Did You Know?:** Due to the July 4 holiday, *KSC Countdown* will not be published on Thursday, July 5. The next issue will be Tuesday, July 10. ★

KSC Countdown is published every Tuesday & Thursday.

Deadlines: 10 a.m. the day before. Send information, comments or questions to:

E-mail – Anita.Barrett-1@ksc.nasa.gov ◆ Mail Code – IDI-011 ◆ Telephone – 867-2815
Countdown on the Internet -- <http://www-pao.ksc.nasa.gov/kscpao/ksccount/2001/2001.htm>